

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An apparatus for displaying image data direction of a terminal, comprising:

a codec for performing converting operation between analogue voice data and digital voice data;

a camera module for performing converting operation between analogue image data and digital image data;

a direction sensor for detecting compass orientation direction of a photographing object;

an A/D converter for converting analogue direction data detected by the direction sensor into digital direction data;

a voice/image communication apparatus for multiplexing or demultiplexing the converted voice, image and direction data;

a LCD module for displaying image and direction data multiplexed from the voice/image communication apparatus, wherein the direction data is displayed within the image which is captured by the apparatus and displayed by the LCD module; and

a control unit for controlling each unit generally.

2. (Previously Presented) The apparatus of claim 1, wherein the direction sensor detects a compass orientation direction of a photographing object, which is identical with a photographing direction of a camera.

3. (Currently Amended) The apparatus of claim 1, wherein the voice/image communication apparatus comprises:

a voice encoding processing unit for encoding the voice data ~~inputted~~ input from the codec or converting the voice data transmitted from a multiplexing processing unit into data for transmitting to a speaker;

an image encoding processing unit for encoding the image data ~~inputted~~ input from a camera module or converting the image data transmitted from a multiplexing processing unit into data for displaying on an LCD;

a direction displaying processing unit for encoding the direction data ~~inputted~~ input from the A/D converter or converting the direction data transmitted from a multiplexing processing unit into data for displaying on an LCD; and

a multiplexing processing unit for multiplexing the voice, image and direction data or demultiplexing to display a multiplexed image and direction data on an LCD.

4. (Previously Presented) The apparatus of claim 3, wherein the direction displaying processing unit calculates compass orientation direction and encodes the calculated compass

orientation direction by formatting the calculated compass orientation direction into a binary value.

5. (Currently Amended) The apparatus of claim 3, wherein the direction displaying processing unit ~~is further set to have~~ displays the direction data in a direction displaying area at one side of ~~the~~ a screen of the LCD.

6. (Currently Amended) The apparatus of claim 3, wherein the direction displaying processing unit ~~is further set to display~~ displays the direction data as a direction on the screen of the LCD.

7. (Currently Amended) The apparatus of claim 3, wherein the direction displaying processing unit ~~is further set to display~~ displays the direction data as a direction on the screen of the LCD in the form of a compass.

8. (Currently Amended) The apparatus of claim 3, wherein the multiplexing processing unit multiplexes encoded packet data by receiving the data from the voice encoding processing unit, image encoding processing unit, and direction displaying processing unit, and inputs the data to an image frame by forming a flag and header to distinguish the image frame.

9. (Previously Presented) The apparatus of claim 3, wherein the multiplexing processing unit is further set to form null data if no data is transmitted to a terminal.

10. (Currently Amended) A method for displaying image data direction of a terminal, comprising:

demultiplexing an image frame received from a multiplexing processing unit and separating the image frame into image, voice, and compass orientation direction data; and

displaying the separated image and compass orientation direction data on a screen of an LCD, wherein the compass orientation data is displayed within the image on the screen of the LCD.

11. (Previously Presented) The method of claim 10, wherein the multiplexing processing unit checks the received image frame and forms null data if the image frame is not separable.

12. (Currently Amended) The method of claim 10, wherein the displaying comprises:
detecting the demultiplexed image data and direction data and transmitting said detected data to an image encoding processing unit and a direction displaying processing unit;
checking the transmitted demultiplexed data for a direction displaying mode from the direction displaying processing unit;

determining a position and a method for displaying the image and compass orientation direction data on the screen of the LCD from the direction displaying processing unit if the direction displaying mode is set; and

displaying the image and compass orientation direction data on the screen of the LCD in the determined position and determined method.

13. (Previously Presented) The method of claim 12, wherein the LCD displays only image data read from a voice/image communication apparatus if the direction displaying mode is not set in the direction displaying processing unit.

14. (Currently Amended) The method of claim 12, wherein the direction displaying processing unit ~~is further set to have~~ displays the compass orientation data in a direction displaying area at one side of the screen of the LCD.

15. (Currently Amended) The method of claim 12, wherein the direction displaying processing unit ~~is further set to display~~ displays the compass orientation data as a direction on the screen of the LCD.

16. (Currently Amended) The method of claim 12, wherein the direction displaying processing unit ~~is further set to display~~ displays the compass orientation data as a direction on the screen of the LCD in the form of a displaying compass.

17. (Previously Presented) The method of claim 12, wherein the displaying comprises a transmitted stop image.

18. (Previously Presented) The method of claim 12, wherein the LCD further displays time and date information with the image and compass orientation direction data.

19. (Currently Amended) A method for displaying image data direction of a terminal, comprising:

formatting a detected analogue compass orientation direction data into a binary value of a certain bite and encoding said binary value;

multiplexing the encoded compass orientation direction data binary value together with image and voice data forming an image frame; and

transmitting the formed image frame to a base station, wherein the formed image frame includes the compass orientation direction data as part of the image to be displayed.

20. (Previously Presented) The method of claim 19, wherein the multiplexing comprises:

receiving packetized voice data through a voice encoding processing unit;
receiving packetized image data through an image encoding processing unit;
multiplexing the received packetized voice and image data and the encoded compass orientation direction data as an image frame; and
generating and inserting flag and header information in the image frame.

21. (Previously Presented) The method of claim 19, wherein a compass orientation direction of a photographing object is calculated by formatting the calculated compass orientation direction data, wherein the data is encoded into an image packet while formatting the compass orientation direction data.

22. (Previously Presented) The method of claim 21, wherein the direction data is formatted to display one bite of information.

23. (Previously Presented) The method of claim 19, wherein the multiplexing step forms null data if data is not transmitted to the base station.